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(54) **ELECTRONIC BROADCAST LOG SYSTEM**

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(51) **Int. Cl.**

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G06F 3/0484	(2013.01)
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G09G 3/36	(2006.01)

(52) **U.S. Cl.**

CPC ***G06F 3/0412*** (2013.01); ***G06F 3/017*** (2013.01); ***G06F 3/04842*** (2013.01); ***G09G 3/36*** (2013.01); *G06F 2203/04101* (2013.01); *G06F 2203/04808* (2013.01)

(58) **Field of Classification Search**

CPC G06F 17/30772

See application file for complete search history.

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(57) **ABSTRACT**

There is provided a system and method for displaying a traffic output synchronized with an automation output, the system including a display, a memory storing a user interface, and a processor configured to receive the traffic output, receive the automation output, synchronize the traffic output with the automation output, and display the traffic output synchronized with the automation output using the user interface on the display. The processor is further configured to advance each of the traffic output and the automation output being displayed by the user interface in real-time. Furthermore, the processor is further configured to update the traffic output being displayed by the user interface based on feedback from the automation output. The updating including marking each element in the traffic output as being aired correctly or not being aired correctly.

20 Claims, 3 Drawing Sheets

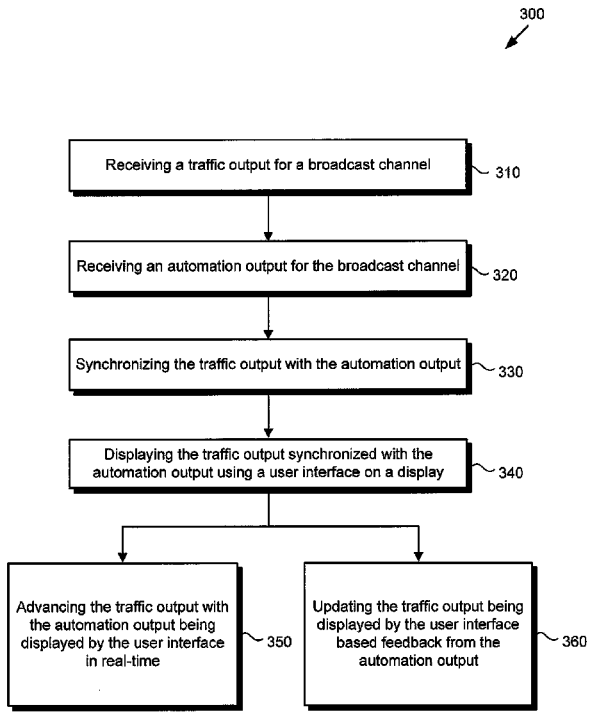


Fig. 1

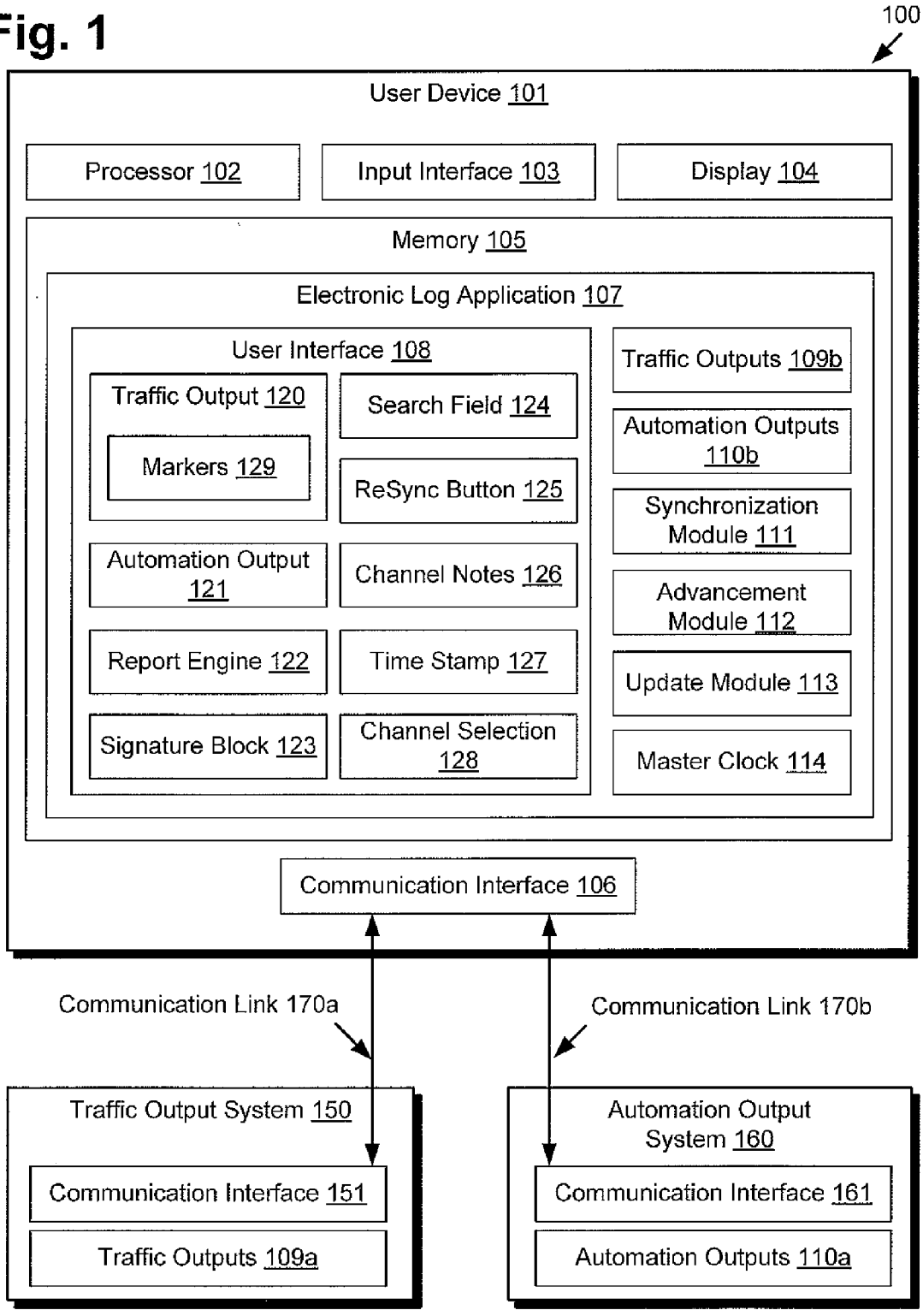

100
User Device 101
Processor 102
Input Interface 103
Display 104
Memory 105
Electronic Log Application 107
User Interface 108
Traffic Output 120
Markers 129
Search Field 124
ReSync Button 125
Automation Output 121
Channel Notes 126
Report Engine 122
Time Stamp 127
Signature Block 123
Channel Selection 128
Traffic Outputs 109b
Automation Outputs 110b
Synchronization Module 111
Advancement Module 112
Update Module 113
Master Clock 114
Communication Interface 106
Communication Link 170a
Communication Link 170b
Traffic Output System 150
Communication Interface 151
Traffic Outputs 109a
Automation Output System 160
Communication Interface 161
Automation Outputs 110a

Fig. 2

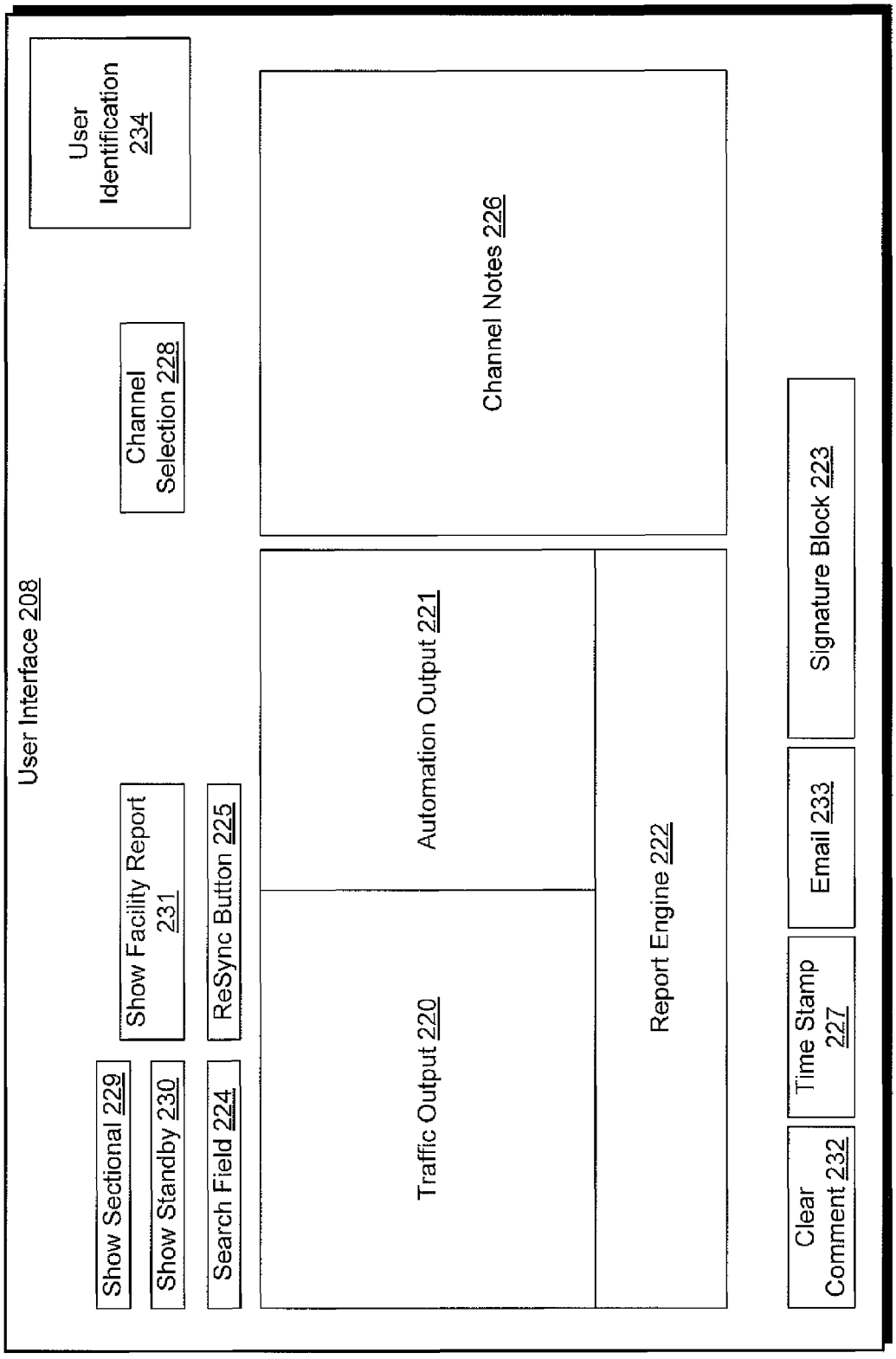
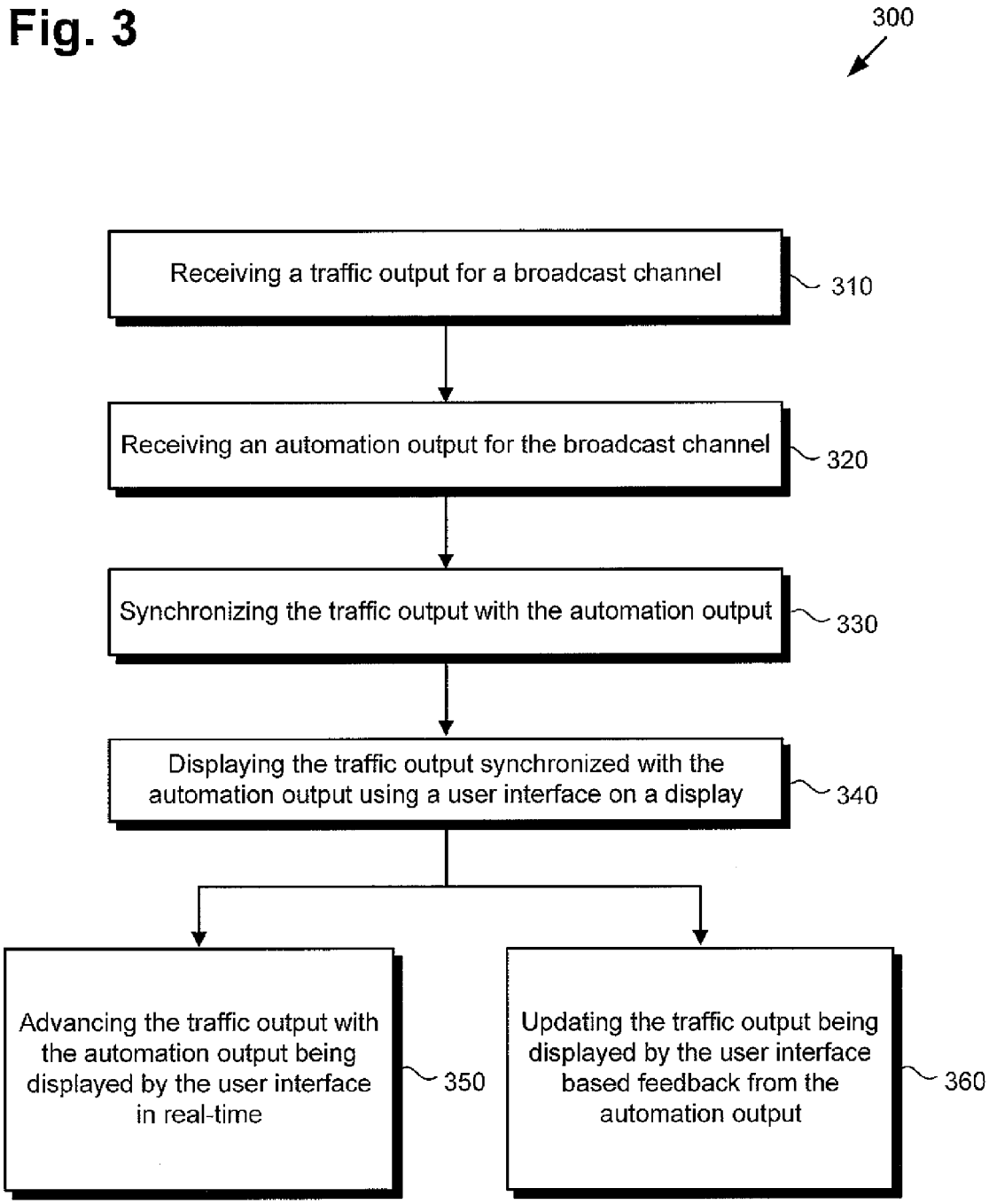

User Interface 208
User Identification 234
Channel Selection 228
Channel Notes 226
Show Facility Report 231
ReSync Button 225
Show Sectional 229
Show Standby 230
Search Field 224
Automation Output 221
Traffic Output 220
Report Engine 222
Email 233
Signature Block 223
Time Stamp 227
Clear Comment 232

Fig. 3


300
Receiving a traffic output for a broadcast channel
310
Receiving an automation output for the broadcast channel
320
Synchronizing the traffic output with the automation output
330
Displaying the traffic output synchronized with the automation output using a user interface on a display
340
Advancing the traffic output with the automation output being displayed by the user interface in real-time
350
Updating the traffic output being displayed by the user interface based feedback from the automation output
360

ELECTRONIC BROADCAST LOG SYSTEM

BACKGROUND

A typical Broadcast Operations Center relies on several sources of information to provide an overview of activities related to content distribution, routing, and playback to air channels. One source of information is the output of a Broadcast Traffic System, which is used to view the specific elements intended for broadcast. A separate source of information is the output of an Automation System, which details which elements are actually being played to air. Typically, the output of the Broadcast Traffic System is printed to paper (the Broadcast Logs) and given to authorized users.

However, many problems can occur in a Broadcast Operations Center that operates in such a fashion. For example, it is often important to compare the traffic output of the Broadcast Traffic System with the automation output of the Automation System to make sure every element of the traffic output is aired correctly. In such an example, in order to ensure that every element airs correctly, a user has to check each element in the traffic output with each element in the automation output, which is a very manual effort and can take a considerable amount of time and effort. For another example, when changes are made to the Broadcast Traffic System after the Log is printed it requires a user to reprint numerous copies of the new traffic output and distribute those copies to authorized users and is again checked against the automation system to ensure changes have been correctly applied.

Another separate and manual function of a Broadcast Center is capturing, investigating and reporting broadcast channel/feed related information, problems and discrepancies for each broadcast day.

SUMMARY

The present disclosure is directed to an electronic broadcast log system, substantially as shown in and/or described in connection with at least one of the figures, as set forth more completely in the claims.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** presents a system for utilizing an electronic broadcasting log, according to one implementation of the present disclosure.

FIG. **2** presents an example of a user interface utilized for an electronic broadcasting log, according to one implementation of the present disclosure.

FIG. **3** shows a flowchart illustrating a method for generating and utilizing an electronic broadcasting log, according to one implementation of the present disclosure.

DETAILED DESCRIPTION

The following description contains specific information pertaining to implementations in the present disclosure. The drawings in the present application and their accompanying detailed description are directed to merely exemplary implementations. Unless noted otherwise, like or corresponding elements among the figures may be indicated by like or corresponding reference numerals. Moreover, the drawings and illustrations in the present application are generally not to scale, and are not intended to correspond to actual relative dimensions.

FIG. **1** presents a system for utilizing an electronic broadcast log, according to one implementation of the present

disclosure. System **100** of FIG. **1** includes user device **101**, traffic output system **150**, and automation output system **160**. User device **101** includes processor **102**, input interface **103**, display **104**, memory **105**, and communication interface **106**. Memory **105** includes electronic log application **107**. Electronic log application **107** includes user interface **108**, traffic outputs **109***b*, automation outputs **110**, synchronization module **111**, advancement module **112**, update module **113**, and master clock **114**. User interface **108** includes traffic output **120**, automation output **121**, report engine **122**, signature block **123**, search field **124**, ReSync button **125**, channel notes **126**, time stamp **127**, and channel selection **128**. Traffic output **120** includes markers **129**. Traffic output system **150** includes traffic outputs **109***a* and communication interface **151**. Automation output system **160** includes automation outputs **110***a* and communication interface **161**. Also illustrated in FIG. **1**, system **100** includes communication link **170***a* and communication link **170***b*.

User device **101** may include a personal computer, a mobile phone, a tablet, a video game console, or any other device capable of executing electronic log application **107**. As shown in FIG. **1**, user device **101** includes input interface **103** and display **104**. Input interface **103** may comprise, for example, a keyboard, a mouse, a game controller, a touch-screen input, a thermal and/or electrical sensor, or any other device capable of accepting user input for use with user device **101**. Display **104** may comprise a liquid crystal display (LCD) screen built into user device **101**. In alternative implementations of the present disclosure, display **104** may be another type of display hardware, such as cathode-ray tubes (CRT) monitors. In yet other implementations, display **104** may also be touch sensitive and may serve as input interface **103**. Moreover, input interface **103** and display **104** may be externally attached to user device **101** through physical or wireless connection.

As illustrated in FIG. **1**, user device **101** further includes processor **102** and memory **105**. Processor **102** may be configured to access memory **105** to store received input or to execute commands, processes, or programs stored in memory **105**, such as electronic log application **107**. Processor **102** may correspond to a processing device, such as a microprocessor or similar hardware processing device, or a plurality of hardware devices. However, in other implementations processor **102** refers to a general processor capable of performing the functions required of user device **101**. Memory **105** is a sufficient memory capable of storing commands, processes, and programs for execution by processor **102**. Memory **105** may be instituted as ROM, RAM, flash memory, or any sufficient memory capable of storing a set of commands. In other implementations, memory **105** may correspond to a plurality memory types or modules.

It should be noted that each of traffic output system **150** and automation output system **160** may be similar to user device **101**. For example, each output of traffic system **150** and automation output system **160** may include, but are not limited to, a personal computer, a mobile phone, a tablet, a video game console, or any other device capable of communicating with another device. Furthermore, traffic output system **150** and automation output system **160** may each include a processor, display, input interface, and memory. For example, a processor (not shown) of traffic output system **150** may be configured to access a memory (not shown) of traffic output system **150** to store received input or to execute commands, processes, or programs stored in the memory. In such an example, the memory of traffic output system **150** may be storing traffic outputs **109***a*. For another example, a processor (not shown) of automation output system **160** may be config-

ured to access a memory (not shown) of automation output system **160** to store received input or to execute commands, processes, or programs stored in the memory. In such an example, the memory of automation output system **160** may be storing automation outputs **110***a*.

It should further be noted that the implementation of FIG. **1** illustrates traffic output system **150** and automation output system **160** as being separate from user device **101**, however, the present disclosure is not limited to the implementation of FIG. **1**. For example, in one implementation, user device **101**, traffic output system **150**, and automation output system **160** may be combined into a single system. For another example, in other implementations, user device **101** may be combined into a single system with either traffic output system **150** or automation output system **160**, or traffic output system **150** may be combined into a single system with automation output system **160**.

Also illustrated in FIG. **1**, user device **101** includes communication interface **106**. Processor **102** of user device **101** is configured to control communication interface **106** to communicate with other electronic devices. For example, as illustrated in FIG. **1**, user device **101** may utilize communication interface **106** to communicate with communication interface **151** of traffic output system **150** and communication interface **161** of automation output system **160** through communication link **170***a* and communication link **170***b*, respectively. Communication interface **106**, communication interface **151**, and communication interface **161** can utilize, as examples, one or more of Wireless Fidelity (Wi-Fi), Worldwide Interoperability for Microwave Access (WiMax), ZigBee, Bluetooth, Algorithm Division Multiple Access (CDMA), Evolution-Data Optimized (EV-DO), Global System for Mobile Communications (GSM), Long Term Evolution (LTE), and other types of wired and wireless interfaces.

Also illustrated in FIG. **1**, traffic output system **150** includes traffic outputs **109***a* and user device **101** includes traffic outputs **109***b*. Traffic outputs **109***a* corresponds to traffic outputs **109***b*, where traffic output system **150** transmitted traffic outputs **109***a* to user device **101** using communication link **170***a* and user device **101** stored traffic outputs **109***a* in electronic log application **107** in memory **105** as traffic outputs **109***b*. Traffic outputs **109***b* include television broadcast schedules for various broadcast channels. Each broadcast schedule for a broadcast channel includes a listing of elements that are scheduled to be aired for that broadcast channel. The elements for broadcast channels can include, but are not limited, television programs, television program segments, sports programs, news programs, advertisements, promotions, graphics, or any other type of program or program segment that can be aired using a broadcast channel. For example, a traffic output from traffic outputs **109***a*, such as traffic output **120**, may specify that a first segment of a television show airs first, followed by three advertisements, followed by a second segment of the television show, followed by three more advertisements, and finally followed by a third segment of the television show.

Also illustrated in FIG. **1**, automation output system **160** includes automation outputs **110***a* and user device **101** includes automation outputs **110***b*. Automation outputs **110***a* corresponds to automation outputs **110**, where automation traffic system **160** transmitted automation outputs **110***a* to user device **101** using communication link **170***b* and user device **101** stored automation outputs **110***a* in electronic log application **107** in memory **105** as automation outputs **110***b*. Automation outputs **110***b* include transmission playlists for the various broadcast channels. Each transmission playlist for a broadcast channel includes a listing of the elements that actually did air, are currently being aired, and/or will be aired for that broadcast channel. As discussed above, the elements can include, but are not limited to, television programs, television program segments, sports programs, news programs, advertisements, promotions, graphics, or any other type of program of program segment that can be aired using a broadcast channel.

Also illustrated in FIG. **1**, user device **101** includes electronic log application **107**. Electronic log application **107** is utilized by user device **101** to both generate and operate an electronic broadcast log. As such, electronic log application **107** includes user interface **108**, which corresponds to the electronic broadcast log, and synchronization module **111**, advancement module **112**, update module **113**, and master clock **114**, which are used by electronic log application **107** to operate and display user interface **108**.

User interface **108** includes traffic output **120** and automation output **121**. Traffic output **120** corresponds to one of traffic outputs **109***b*, and automation output **121** corresponds to one of automation outputs **110***b*. As such, traffic output **120** includes a broadcast schedule for a broadcast channel and automation output **121** includes a transmission playlist for the corresponding broadcast channel. As illustrated in FIG. **1**, user interface **108** renders both traffic output **120** and automation output **121** on a single electronic interface. For example, in one implementation, traffic output **120** and automation output **121** are rendered right next to each other by user interface **108**.

While rendering both traffic output **120** and automation output **121** by user interface **108**, electronic log application **107** utilizes, as discussed above, each of synchronization module **111**, advancement module **112**, update module **113**, and master clock **114** to operate user interface **108**. Synchronization module **111** may be utilized by electronic log application **107** to synchronize traffic output **120** with automation output **121**. In synchronizing traffic output **120** with automation output **121**, automation output **121** drives the synchronization. For example, as automation output **121** is automatically being displayed and advanced by electronic log application **107** using user interface **108**, synchronization module **111** automatically syncs traffic output **120** with automation output **121**. In such an example, as will be discussed in more detail below, as elements of automation output **121** advance, traffic output **120** is advanced to reflect the advancement of automation output **121**.

Advancement module **112** may be utilized by electronic log application **107** to advance traffic output **120** in real-time according to master clock **114** when automation output **121** stops, where master clock **114** includes a clock that synchronizes a time used by a Broadcast Operations Center to broadcast channels. For example, during live feeds or non-program time periods, automation output **121** will automatically advance to the next scheduled element and then stop advancing. During these time periods, advancement module **112** will continue to advance traffic output **120** in real-time according to master clock **114** even though automation output **121** has been stopped at the next scheduled element. Once automation output **121** begins to advance again, such as when there is a break in the live feed and the next scheduled program is broadcast, then traffic output **120** is once again driven by automation output **121** and advanced with automation output **121**.

It should be noted that advancement module **112** will only advance traffic output **120** to the next scheduled element while automation output **121** is stopped. For example, if a live feed is airing and advancement module **112** is advancing traffic output **120** according to master clock **114**, advance-

ment module **112** will only advance traffic output **120** to the next scheduled element according to automation output **121**. This way when the next scheduled element is broadcast and automation output **121** starts advancing, traffic output **120** is automatically synced with automation output **121** and will once again be driven by automation output **121**.

Updates module **113** may be utilized by electronic log application **107** to update traffic output **120** being displayed by user interface **108** based on feedback from automation output **121**. The feedback from automation output **121** can include comparing automation output **121** with traffic output **120** to determine which elements of traffic output **120** either did not air correctly, or which elements from traffic output **120** did not air at all. Update module **113** updates traffic output **120** with markers **129**, where Markers **129** mark scheduled elements from traffic output **120** as having been aired correctly or as not having been aired correctly based on the feedback from automation output **121**. As such, markers **129** may include, but are not limited to, color codes, checkmarks, notes, signs, signals, or any other type of markings that can be used by electronic log application **107** to illustrate if scheduled elements from traffic output **120** were aired correctly or not aired correctly. For example, update module **113** may highlight scheduled elements from traffic output **120** that aired correctly in green and highlight scheduled elements from traffic output **120** that did not air correctly in red. This way a user of electronic log application **107** can quickly and easily determine if all of the scheduled elements from traffic output **120** aired as scheduled.

For example, update module **113** may update traffic output **120** based on feedback from automation device **121**, where the feedback includes comparing the elements of traffic output **120** with the elements of automation output **121**. In such an example, elements listed in traffic output **120** may include four difference commercials that are supposed to air, commercials A, B, C, and D. Feedback from automation output **121** may show that commercials. A, B, C, and E actually did air. As such, updating module **113** would compare the elements of traffic output **120** with the elements of automation output **121** and determine that commercial D did not air correctly as commercial E aired instead. Therefore, update module **113** would update traffic output **120** to show that commercial A, B, and C aired correctly, however, update module **113** would update traffic output **120** to show that commercial D did not air correctly.

In one implementation, update module **113** automatically updates traffic output **120** in real-time. For example, each time automation output **121** advances to a new element, that new elements is compared with the corresponding scheduled element from traffic output **120** to check if the scheduled element aired correctly according to traffic output **120**. In such an example, if the scheduled element from traffic output **120** did air correctly, then the scheduled element will be marked as aired correctly and if the scheduled element from traffic output **120** did not air correctly, then the scheduled element will be marked as not airing correctly. In other implementations, update module **120** may update traffic output **120** periodically, after a set number of elements have been aired, or each time a user chooses to update traffic output **120**.

It should be noted that update module **113** further automatically updates traffic output **120** when changes are made to traffic output **120**. For example, if traffic output system **150** makes any changes to traffic output **120**, electronic log application **107** will utilize update module **113** to automatically update traffic output **120** being displayed by user interface **108** to reflect the changes that were made. As such, a user of electronic log application **107** will not need to constantly check to see if changes have been made to traffic output **120** as traffic output **120** being displayed by user interface **108** will always reflected the most updated version.

Also illustrated in FIG. **1**, user interface **108** of electronic log application **107** includes report engine **122**. Report engine **122** includes a location rendered by user interface **108** that can be utilized by of user interface **108** to input information regarding discrepancies that occur during normal operation of broadcast channels. Discrepancies may include problems with the airing of programs or discrepancies may include more general operational problems. For example, a user may utilize report engine **122** to report that a program did not air or why the program did not air correctly. In one implementation, discrepancy reports **122** may be synced with master clock **114** so that each discrepancy reported using report engine **122** is time stamped.

Also illustrated in FIG. **1**, user interface **108** of electronic log application **107** includes signature block **123**. Signature block **123** corresponds to a location rendered by user interface **108** that a user can utilize to certify that scheduled elements within traffic output **120** were correctly aired as reported by automation output **121**. For example, a user of electronic log application **107** can utilize signature block **123** to verify that each scheduled element in traffic output **120** aired as scheduled by either watching the broadcast channel or looking at automation output **121**. As such, signature block **123** may include, but is not limited to, a place to type a signature in, a place to write a signature in, a button to click, a thumbprint scanner on user device **101**, or any other type of mechanism that can be used to electronically sign a verification report.

Also illustrated in FIG. **1**, user interface **108** of electronic log application **107** includes search field **124** and ReSync button **125**. Search field **124** corresponds to a location rendered by user interface **108** that a user can utilize to quickly search through traffic output **120** for specific elements. For example, a user of electronic log application **107** may use search field **124** to search to see if traffic output **120** includes a specific scheduled program. As such, search field **124** may include, but is not limited to, a place to type in a search query, a place to write in a search query, a dropdown menu that includes different search options to choose from, or any other type of searching method a user can use to search through traffic output **120**.

It should be noted that when searching traffic output **120**, synchronization module **111** still continues to sync traffic output **120** with automation output **121**. As such, searching through traffic output **120** merely changes which elements of traffic output **120** are being rendered by user interface **108**. However, searching through traffic output **120** does not affect the synchronization of traffic output **120** with automation output **121**.

ReSync button **125** corresponds to a button rendered by user interface **108** that a user can utilize to return to a synced view of traffic output **120** and automation output **121**. For example, as discussed above, user interface **108** renders traffic output **120** synced with automation output **121**. If a user of user interface **108** then uses search field **124** to search for a specific element in traffic output **120**, causing user interface **108** to no longer display a synced view of traffic output **120** and automation output **121**, the user can utilize ReSync button **125** to once again have user interface **108** render traffic output **120** synced with automation output **121**.

Also illustrated in FIG. **1**, user interface **108** of electronic log application **107** includes channel notes **126**. Channel notes **126** corresponds to a location rendered by user interface **108** that a user can utilize to either view notes that have already been submitted about a broadcast channel (via traffic

output **109***a*) or to submit his or her own notes on the broadcast channel Information in channel notes **126** can include anything from notes on specific elements from traffic output **120** or automation output **121**, such as how to operate scheduled elements in traffic output **120**, to more general notes about operations in a Broadcast Operations Center.

Also illustrated in FIG. **1**, user interface **108** of electronic log application **107** includes time stamp **127**. Time stamp **127** corresponds to a button rendered by user interface **108** that a user can utilize to generate and store events, where each event generated by user interface **108** includes a time stamp of when the event was generated according to master clock **114**. The user can then later return to the stored event and add notes about what occurred during the event. For example, a user may utilize time stamp **127** to generate an event that corresponds to a spot in a live program where a host advertised a specific product. In such an example, the event would include a time stamp of when the host advertised the product during the live program. The user can then go back later and add notes to the event, such as what product was advertised and how long the host advertised the product. Time stamp **127** thus gives users of electronic log application **107** an easy way to keep track of different events that occur during the airing of broadcast channels which is currently achieved by manually writing the time observed on the paper Broadcast Log.

Also illustrated in FIG. **1**, user interface **108** of electronic log application **107** includes channel selection **128**. Channel selection **128** corresponds to a location rendered by user interface **108** that a user can utilize to choose which broadcast channel user interface **108** is rendering. As discussed above, user device **108** stores traffic outputs **109***b* and automation outputs **110***b* for various broadcast channels. Channel selection **128** thus gives the user the ability to select which broadcast channel to render by user interface **108**. For example, user interface **108** may be rendering a first traffic output and a first automation output, where the first traffic output and the first automation output correspond to a first broadcast channel. The user may then utilize channel selection **128** to select a second broadcast channel so that user interface **108** renders a second traffic output and a second automation output, where the second traffic output and the second automation output correspond to the second broadcast channel.

In the implementation of FIG. **1**, electronic log application **107** utilizes user interface **108** to render traffic output **120** and automation output **121** of a broadcast channel. While rendering traffic output **120** and automation output **121**, electronic log application **107** utilizes synchronization module to synchronize traffic output **120** based on automation output **121**. Electronic log application **107** further utilizes update module **113** to update traffic output **120** with markers **129** based on feedback from automation output **121**. Markers **129** mark each element of traffic output **120** as having been aired correctly or as not having been aired correctly. Update module **113** may update traffic output **120** based on a comparison between traffic output **120** and automation output **121**.

It should be noted that the implementation of FIG. **1** may further include security features. For example, in one implementation, electronic log application **107** may include a security feature that does not allow users of electronic log application **107** to adjust or change traffic output **120** or automation output **121**. In such an implementation, users of electronic log application **107** may only be able to view elements being displayed on user interface **108** of traffic output **120** and automation output **121**.

It should further be noted more than one user may log into electronic log application **107** at a single time for the same channel, as will be discussed in more detail below. For example, in a first implementation, multiple users may be logged into electronic log system **107** viewing the same channel. In such an example, only one of the users logged into electronic log application **107** may be authorized to add, edit, or save data and information using electronic log application **107** for that channel. The user that is allowed to add, edit, or save data and information using electronic log application **107** may be the first user to log into electronic log application **107**, or may be an authorized user of electronic log application **107**. For another example, in other implementations where multiple users are logged into electronic log application **107** viewing a single channel, more than one user may be able to add, edit, or save data and information using electronic log application **107** for that channel.

For example, in the first implementation, multiple users may be logged into electronic log application **107** viewing a channel being broadcast in the East. In such an example, only one of the multiple users may be able to add, edit, or save data and information using electronic log application **107** for the channel being broadcast in the East. Furthermore, multiple users may be logged into electronic log application **107** viewing the same channel being broadcast in the West. Again, one of the multiple users may be able to add, edit, or save data and information using electronic log application **107** for the channel being broadcast in the West.

FIG. **2** presents an example of an user interface utilized for an electronic broadcast log, according to one implementation of the present disclosure. User interface **208** includes traffic output **220**, automation output **221**, report engine **222**, signature block **223**, search field **224**, ReSync button **225**, channel notes **226**, time stamp **228**, channel selection **229**, show sectional **229**, show standby **230**, show facility report **231**, clear comment **232**, email **233**, and user identification **234**. With regards to FIG. **2**, it should be noted that user interface **208**, traffic output **220**, automation output **221**, report engine **222**, signature block **223**, search field **224**, ReSync button **225**, channel notes **226**, time stamp **228** correspond respectively to traffic output **120**, automation output **121**, report engine **122**, signature block **123**, search field **124**, ReSync button **125**, channel notes **126**, time stamp **127**, and channel selection **128** of FIG. **1**.

As illustrated in FIG. **2**, user interface **208** renders traffic output **220** next to automation output **221**. By rendering traffic output **220** next to automation output **221** on user interface **208**, a user is able to easily see what elements from traffic output **220** are scheduled to air and what elements from automation output **221** either did, will, and/or are currently airing in near real-time. The user can also directly compare traffic output **220** with automation output **221** since traffic report **220** is synchronized with automation output **221**. Finally, the user can determine any discrepancies between traffic output **220** and automation output **221** based on markers included in traffic output **220**, such as markers **129** from FIG. **1**.

As further illustrated in FIG. **2**, user interface **208** includes additional elements not illustrated in FIG. **1**, such as show sectional **229**, show standby **230**, show facility report **231**, clear comment **232**, email **233**, and user identification **234**. Show sectional **229** corresponds to a location rendered by user interface **208** that a user can utilize to switch between sectional channels of a broadcast channel, where sectional channels correspond to the same broadcast channel except each is directed towards and aired in a different region or location. As such, each sectional channel may include its own advertisements or other elements for the broadcast channel, and thus each section channel may include its own traffic output and automation output. For example, one sectional (or

sub) channel for a main broadcast channel might include an advertisement for snow tires while a second sectional channel for the same broadcast channel might include an advertisement for summer tires, where each advertisement is scheduled to play in the same advertisement spot in the broadcast channels. A user can thus utilize show sectional **229** to select which sectional channel is being rendered by user interface **208** in a similar way as the user can use channel selection **228** to select which main broadcast channel is being rendered by user interface **208**.

Show standby **230** corresponds to a location in user interface **208** that a user can utilize to access the standby channel for the main broadcast channel being rendered by user interface **208**. For example, user interface **208** may be rendering the traffic output and automation output of a broadcast channel that is currently airing a live program. The broadcast channel may include a standby channel that can be switched to if there are any problems that arrive during the airing of the live programs. A user can then use show standby **230** to render the traffic output and automation output of the standby channel by user interface **208**.

User identification **234** includes a location rendered by user interface **208** that displays which user is using user interface **208**. For example, in one implementation, as discussed above with regards to FIG. **1**, a user may use signature block **223** to certify that elements of traffic output **220** were aired as scheduled by signing his or her name electronically. In such an implementation, the user may merely type or write his or her name in user identification **234** so that user interface **208** knows who is using signature block **223**. However, in another implementation, the electronic log application may include a user login, which requires the user to enter a username and password to access user interface **208**. In such an example, after the user has logged in and accessed user interface **208**, user identification **234** will automatically display the identity of that user. Furthermore, signature block **223** may also automatically sync with the identity of the logged in user so that the electronic log application knows who is certifying elements of traffic output **220**.

Show facility report **231** corresponds to a button rendered by user interface **208** that a user can utilize to view facility reports. Clear comment **232** corresponds to a button rendered by user interface **208** that an authorized user can utilize to clear any comments that were made by the user in report engine **222**. Finally, email **233** corresponds to a button rendered by user interface **208** that an authorized user can utilize to export reports via email. Furthermore, in one implementation, user identification **234** may sync with email **233** so that the personal email of the user of user interface **208** is used to transmit any emails.

It should be noted that the implementation of FIG. **2** shows user interface **208** including numerous features, such as traffic output **220**, automation output **221**, report engine **222**, signature block **223**, search field **224**, ReSync button **225**, channel notes **226**, time stamp **228**, channel selection **229**, show sectional **229**, show standby **230**, show facility report **231**, clear comment **232**, email **233**, and user identification **234**, however, the present disclosure is not limited to the implementation of FIG. **2**. In other implementations, a user interface may include more or less features than those illustrated in FIG. **2**. Furthermore, still in other implementations, the features of a user interface may be configured using different arrangements. For example, the discrepancy report may or may not be displayed and/the location of the displays may be configured by an authorized user.

It should further be noted that each of traffic output **220**, report engine **222**, and channel notes **226** may include a scroll bar (not shown). A user of user interface **208** may utilize the scroll bars to search through each of traffic output **220**, report engine **222**, and channel notes **226**. For example, and as discussed above, a user may search through the elements of traffic output **220**. In such an example, the user may thus use the scroll bar for traffic output **220** to search for scheduled elements in traffic output **220**.

FIG. **3** shows a flowchart illustrating a method for generating and utilizing an electronic broadcast log, according to one implementation of the present disclosure. The approach and technique indicated by flowchart **300** are sufficient to describe at least one implementation of the present disclosure, however, other implementations of the disclosure may utilize approaches and techniques different from those shown in flowchart **300**. Furthermore, while flowchart **300** is described with respect to FIG. **1**, the disclosed inventive concepts are not intended to be limited by specific features shown and described with respect to FIG. **1**. Furthermore, with respect to the method illustrated in FIG. **3**, it is noted that certain details and features have been left out of flowchart **300** in order not to obscure the discussion of inventive features in the present application.

Referring now to flowchart **300** of FIG. **3**, flowchart **300** includes receiving a traffic output for a broadcast channel (**310**). For example, processor **102** of user device **101** can receive traffic output **120**, where traffic output **120** corresponds to a broadcast schedule for a broadcast channel. Processor **102** can either receive traffic output **120** from traffic outputs **109***a* in traffic output system **150** using communication link **170***a*, or if user device **101** already has received traffic outputs **109***b* from traffic output system **150**, processor **102** can retrieve traffic output **120** from traffic outputs **109***b*. As discussed above, traffic output **120** includes a listing of elements that are scheduled to be aired for the broadcast channel.

Flowchart **300** also includes receiving an automation output for the broadcast channel (**320**). For example, processor **102** of user device **101** can receive automation output **121**, where automation output **121** corresponds to a transmission playlist for the broadcast channel. Processor **102** can either receive automation output **121** from automation outputs **110***a* in automation output system **160** using communication link **170***b*, or if user device **101** has already received automation outputs **110***b* from automation output system **160**, processor **102** can retrieve automation output **121** from automation outputs **110***b*. As discussed above, automation output **121** includes a listing of elements that have already aired, are currently airing, and/or are scheduled to be aired for the broadcast channel.

Flowchart **300** also includes synchronizing the traffic output with the automation output (**330**). For example, processor **102** of user device **101** may utilize synchronization module **111** of electronic log application **107** to synchronize traffic output **120** with automation log **121**. As discussed above, automation output **121** drives the synchronization of traffic output **120** with automation output **121**. For example, as automation output **121** is automatically displayed and advanced by electronic log application **107** using user interface **108**, synchronization module **111** automatically syncs the elements of traffic output **120** with the elements of automation output **121**.

Flowchart **300** also includes displaying the traffic output synchronized with the automation output using a user interface on a display (**340**). For example, processor **102** of user device **101** may display traffic output **120** synchronized with automation output **121** using user interface **108** on display

104. As discussed above, in one implementation, traffic output 120 is displayed next to automation output 121 by user interface 108.

Flowchart 300 also includes advancing the traffic output and the automation output being displayed by the user interface in real-time (350). For example, processor 102 of user device 101 may advance traffic output 120 and automation output 121 being displayed by user interface 108 in real-time. As discussed above, automation output 121 is automatically advanced by electronic log application 107 on user interface 108 and traffic output 120 is synced with and automatically advances with automation output 121. Furthermore, when automation output 121 stops advancing, such as during a live feed or non-program time periods, advancement module 112 advances traffic output 120 according to master clock 114.

Concurrently, flowchart 300 also includes updating the traffic output being displayed by the user interface based on feedback from automation output (360). For example, processor 102 of user device 101 may utilize update module 113 of electronic log application 107 to update traffic output 120 being displayed by user interface 108 based on feedback from automation output 121. As discussed above, feedback from automation output 121 includes comparing automation output 121 with traffic output 120 to determine which elements of traffic output 120 either did not air correctly, or which elements from traffic output 120 did not air at all. Update module 113 updates traffic output with markers 129, where markers 129 mark scheduled elements from traffic output 120 as have been aired correctly or as not having been aired correctly based on the feedback from automation output 121.

It should be noted that flowchart 300 may be repeated when a user of user interface 108 selects a new channel using channel selection 128. For example, processor 102 of user device 101 may receive a second traffic output and a second automation output for a second broadcast channel in response to the user using channel selection 128 to select the second broadcast channel. Processor 102 may then utilize synchronization module 111 to synchronize the second traffic output with the second automation output and display the second traffic output synchronized with the second automation output using user interface 108 on display 104. Finally processor 102 may advance the second traffic output and the second automation output being displayed by user interface 108, and utilize update module 113 to update the second traffic output based on feedback from the second automation output.

From the above description it is manifest that various techniques can be used for implementing the concepts described in the present application without departing from the scope of those concepts. Moreover, while the concepts have been described with specific reference to certain implementations, a person of ordinary skill in the art would recognize that changes can be made in form and detail without departing from the scope of those concepts. As such, the described implementations are to be considered in all respects as illustrative and not restrictive. It should also be understood that the present application is not limited to the particular implementations described above, but many rearrangements, modifications, and substitutions are possible without departing from the scope of the present disclosure.

What is claimed is:

1. A system for displaying a traffic output synchronized with an automation output, the system comprising:
- a display;
- a memory storing a user interface; and
- a processor configured to:
  - receive the traffic output;
  - receive the automation output;
  - synchronize the traffic output with the automation output; and
  - display the traffic output synchronized with the automation output using the user interface on the display, wherein the user interface includes a location for reporting a discrepancy.

2. The system of claim 1, wherein the processor is further configured to advance each of the traffic output and the automation output being displayed by the user interface in real-time.

3. The system of claim 1, wherein the processor is further configured to update the traffic output being displayed by the user interface based on feedback from the automation output.

4. The system of claim 3, wherein updating the traffic output includes marking each event of the traffic output as being aired correctly or not being aired correctly.

5. A system for displaying a traffic output synchronized with an automation output, the system comprising:
- a display;
- a memory storing a user interface including a time stamp button; and
- a processor configured to:
  - receive the traffic output;
  - receive the automation output;
  - synchronize the traffic output with the automation output;
  - display the traffic output synchronized with the automation output using the user interface on the display
  - generate an event that includes a time stamp in response to a user utilizing the time stamp button; and
  - store the event in the memory.

6. The system of claim 5, wherein the processor is further configured to update the traffic output being displayed by the user interface based on feedback from the automation output.

7. A system for displaying a traffic output synchronized with an automation output, the system comprising:
- a display;
- a memory storing a user interface including a channel selection; and
- a processor configured to:
  - receive the traffic output;
  - receive the automation output;
  - synchronize the traffic output with the automation output;
  - display the traffic output synchronized with the automation output using the user interface on the display
  - receive a new channel from a user using the channel selection;
  - receive an another traffic output for the new channel;
  - receive an another automation for the new channel;
  - synchronize the another traffic output with the another automation output; and
  - display the another traffic output synchronized with the another automation output using the user interface on the display.

8. An electronic log application stored in a non-transitory storage device for execution by a processor to display a traffic output synchronized with an automation output, the electronic log application comprising:
- a user interface for execution by the processor, the user interface configured to render the traffic output and the automation output, wherein the user interface is further configured to render a report engine;
- a synchronization module for execution by the processor, the synchronization module configured to synchronize the traffic output with the automation output on the user interface; and

an update module for execution by the processor, the update module configured to update the traffic output based on feedback from the automation output.

9. The electronic log application of claim **8**, wherein the traffic output and the automation output are advanced in real-time.

10. The electronic log application of claim **8**, wherein updating the traffic output includes marking each event of the traffic output as being aired correctly or not being aired correctly.

11. An electronic log application stored in a non-transitory storage device for execution by a processor to display a traffic output synchronized with an automation output, the electronic log application comprising:

a user interface for execution by the processor, the user interface configured to render the traffic output and the automation output, wherein the user interface is further configured to render a time stamp button, wherein an event is generated and stored in response to a user utilizing the time stamp button;

a synchronization module for execution by the processor, the synchronization module configured to synchronize the traffic output with the automation output on the user interface; and

an update module for execution by the processor, the update module configured to update the traffic output based on feedback from the automation output.

12. The electronic log application of claim **11**, wherein the traffic output and the automation output are advanced in real-time.

13. An electronic log application stored in a non-transitory storage device for execution by a processor to display a traffic output synchronized with an automation output, the electronic log application comprising:

a user interface for execution by the processor, the user interface configured to render the traffic output and the automation output, wherein the user interface further includes a channel selection button;

a synchronization module for execution by the processor, the synchronization module configured to synchronize the traffic output with the automation output on the user interface; and

an update module for execution by the processor, the update module configured to update the traffic output based on feedback from the automation output;

wherein the user interface is further configured to render another traffic output synchronized with another automation output in response to a user utilizing the channel selection button to select a new channel, each of the another traffic output and the another automation output corresponding to the new channel.

14. A method for displaying a traffic output synchronized with an automation output, the method comprising:

receiving the traffic output;

receiving the automation output;

synchronizing the traffic output with the automation output; and

displaying the traffic output synchronized with the automation output using a user interface on a display, wherein the user interface includes a location for reporting a discrepancy.

15. The method of claim **14**, wherein the method further comprises advancing each of the traffic output and the automation output being displayed by the user interface in real-time.

16. The method of claim **14**, wherein the method further comprises updating the traffic output displayed by the user interface based on feedback from the automation output.

17. The method of claim **16**, wherein updating the traffic output includes marking each event of the traffic output as being aired correctly or not being aired correctly.

18. A method for displaying a traffic output synchronized with an automation output, the method comprising:

receiving the traffic output;

receiving the automation output;

synchronizing the traffic output with the automation output;

displaying the traffic output synchronized with the automation output using a user interface on a display, wherein the user interface includes a time stamp button;

generating an event that includes a time stamp in response to a user utilizing the time stamp button; and

storing the event in a memory.

19. The method of claim **18**, wherein the method further comprises updating the traffic output displayed by the user interface based on feedback from the automation output.

20. A method for displaying a traffic output synchronized with an automation output, the method comprising:

receiving the traffic output;

receiving the automation output;

synchronizing the traffic output with the automation output;

displaying the traffic output synchronized with the automation output using a user interface on a display, wherein the user interface includes a channel selection;

receiving a new channel from a user using the channel selection;

receiving an another traffic output for the new channel;

receiving an another automation output for the new channel;

synchronizing the another traffic output with the another automation output; and

displaying the another traffic output synchronized with the another automation output using the user interface on the display.

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